IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

TQ DELTA, LLC

Plaintiff,

v.

PACE PLC and 2WIRE, INC.

Defendant.

Civil Action No. 13-1835-RGA

JURY TRIAL DEMANDED

2WIRE'S ANSWER, AFFIRMATIVE DEFENSES, AND COUNTERCLAIMS TO SECOND AMENDED COMPLAINT FOR PATENT INFRINGEMENT

Colm F. Connolly (#3151) The Nemours Building 1007 N. Orange Street, Suite 501 Wilmington, DE 19801 (302) 574-7290 (302) 574-3001 cconnolly@morganlewis.com

Counsel for Defendant 2Wire, Inc.

Date: June 2, 2014

Defendant 2Wire, Inc. ("2Wire"), through its counsel, hereby answers Plaintiff TQ Delta, LLC ("TQD")'s Second Amended Complaint for Patent Infringement ("SAC"). To the extent not explicitly admitted, all allegations of the SAC are denied. The inclusion of headings below is only for consistency with the SAC and are not admissions of the matters set forth in the headings. For avoidance of doubt, the Answer and admissions, denials, and averments set forth herein apply only to 2Wire and are not made on behalf of any other entity identified in the SAC.

THE PARTIES

- 1. 2Wire lacks sufficient knowledge or information to form a belief as to the allegations in this paragraph and on that basis denies them.
- 2. Pursuant to the parties' stipulation (D.I. 30), Pace Americas, LLC was dismissed from the case. Accordingly, this allegation is most and 2Wire will neither admit nor deny the allegations in this paragraph.
- 3. 2Wire admits that Pace plc is a corporation organized and existing under the laws of the United Kingdom and has its principal place of business at the address set forth in the SAC.
- 4. 2Wire admits that it is a corporation organized under the laws of the State of Delaware with a principal place of business at 1764 Automation Parkway, San Jose, California. 2Wire admits that Pace plc is its ultimate corporate parent. 2Wire denies the remaining allegations in this paragraph.

JURISDICTION AND VENUE

- 5. 2Wire admits that the SAC purports to state a claim for patent infringement arising under the patent laws of the United States, 35 U.S.C. § 1 *et seq.*
- 6. The allegations in this paragraph are legal conclusions to which no admission or denial is necessary.
 - 7. The allegations in this paragraph are legal conclusions to which no admission or

denial is necessary.

8. The allegations in this paragraph are legal conclusions to which no admission or denial is required.

BACKGROUND

- 9. 2Wire lacks sufficient knowledge or information to form a belief as to the allegations in this paragraph and on that basis denies them.
- 10. 2Wire admits that digital subscriber line ("DSL") technology may be used to provide broadband access to data networks such as the Internet via a local telephone network.

 2Wire lacks sufficient knowledge or information to form a belief as to the remaining allegations in this paragraph and on that basis denies them.
- 11. 2Wire admits that TQD purports to own patents previously owned by Aware, Inc. that are essential to certain standards. Except as admitted, 2Wire denies the allegations of this paragraph.
- 12. 2Wire admits that it makes, sells, offers for sale, and/or imports gateways that operate in accordance with certain standards. Except as admitted, 2Wire denies the allegations of this paragraph.
- 13. 2Wire admits that it received a letter purportedly sent on behalf of TQD bearing the date July 15, 2013. Except as admitted, 2Wire denies the allegations of this paragraph.
- 14. 2Wire admits that it received a letter purportedly sent on behalf of TQD bearing the date August 6, 2013. 2Wire admits that it had not responded to TQD's July 15, 2013 letter prior to receiving TQD's August 6, 2013 letter. Except as admitted, 2Wire denies the allegations of this paragraph.
 - 15. 2Wire admits that it received an email purportedly sent on behalf of TQD on or

about August 23, 2013 that contains the quoted language. 2Wire admits that it had not responded to TQD's August 6, 2013 letter prior to receiving TQD's August 23, 2013 email. Except as admitted, 2Wire denies the allegations of this paragraph.

- 16. 2Wire denies the allegations in this paragraph.
- 17. 2Wire admits that it has not "applied for a license under TQ Delta's DSL patent portfolio." Except as admitted, 2Wire denies the allegations of this paragraph.

COUNT I — INFRINGEMENT OF U.S. PATENT NO. 8,090,008

- 18. 2Wire incorporates by reference its responses to Paragraphs 1-17 as though set forth fully herein.
- 19. 2Wire admits that on its face United States Patent No. 8,090,008 ("the '008 Patent") is entitled "System and Method for Scrambling the Phase of the Carriers in a Multicarrier Communications System" and bears an issue date of January 3, 2013. 2Wire further admits that Exhibit 1 to the SAC purports to be a copy of the '008 Patent. Except as admitted, 2Wire lacks sufficient knowledge or information to form a belief as to the remaining allegations in this paragraph and on that basis denies them.
 - 20. 2Wire denies the allegations of this paragraph.
- 21. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
- 22. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
 - 23. 2Wire denies the allegations of this paragraph.

COUNT II — INFRINGEMENT OF U.S. PATENT NO. 8,073,041

- 24. 2Wire incorporates by reference its responses to Paragraphs 1-17 as though set forth fully herein.
- 25. 2Wire admits that on its face United States Patent No. 8,073,041 ("the '041 Patent") is entitled "System and Method for Descrambling the Phase of the Carriers in a Multicarrier Communications System" and bears an issue date of December 6, 2011. 2Wire further admits that Exhibit 2 to the SAC purports to be a copy of the '041 Patent. Except as admitted, 2Wire lacks sufficient knowledge or information to form a belief as to the remaining allegations in this paragraph and on that basis denies them.
 - 26. 2Wire denies the allegations of this paragraph.
- 27. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
- 28. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
 - 29. 2Wire denies the allegations of this paragraph.

COUNT III — INFRINGEMENT OF U.S. PATENT NO. 7,292,627

- 30. 2Wire incorporates by reference its responses to Paragraphs 1-17 as though set forth fully herein.
- 31. 2Wire admits that on its face United States Patent No. 7,292,627 ("the '627 Patent") is entitled "System and Method for Scrambling the Phase of the Carriers in a Multicarrier Communications System" and bears an issue date of November 6, 2007. 2Wire

further admits that Exhibit 3 to the SAC purports to be a copy of the '627 Patent. Except as admitted, 2Wire lacks sufficient knowledge or information to form a belief as to the remaining allegations in this paragraph and on that basis denies them.

- 32. 2Wire denies the allegations of this paragraph.
- 33. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
- 34. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
 - 35. 2Wire denies the allegations of this paragraph.

COUNT IV — INFRINGEMENT OF U.S. PATENT NO. 7,471,721

- 36. 2Wire incorporates by reference its responses to Paragraphs 1-17 as though set forth fully herein.
- 37. 2Wire admits that on its face United States Patent No. 7,471,721 ("the '721 Patent") is entitled "System and Method for Scrambling the Phase of the Carriers in a Multicarrier Communications System" and bears an issue date of December 30, 2008. 2Wire further admits that Exhibit 4 to the SAC purports to be a copy of the '721 Patent. Except as admitted, 2Wire lacks sufficient knowledge or information to form a belief as to the remaining allegations in this paragraph and on that basis denies them.
 - 38. 2Wire denies the allegations of this paragraph.
- 39. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required,

2Wire denies the allegations of this paragraph.

- 40. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
 - 41. 2Wire denies the allegations of this paragraph.

COUNT V — INFRINGEMENT OF U.S. PATENT NO. 8,218,610

- 42. 2Wire incorporates by reference its responses to Paragraphs 1-17 as though set forth fully herein.
- 43. 2Wire admits that on its face United States Patent No. 8,218,610 ("the '610 Patent") is entitled "System and Method for Descrambling the Phase of the Carriers in a Multicarrier Communications System" and bears an issue date of July 10, 2012. 2Wire further admits that Exhibit 5 to the SAC purports to be a copy of the '610 Patent. Except as admitted, 2Wire lacks sufficient knowledge or information to form a belief as to the remaining allegations in this paragraph and on that basis denies them.
 - 44. 2Wire denies the allegations of this paragraph.
- 45. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
- 46. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
 - 47. 2Wire denies the allegations of this paragraph.

COUNT VI — INFRINGEMENT OF U.S. PATENT NO. 8,355,427

- 48. 2Wire incorporates by reference its responses to Paragraphs 1-17 as though set forth fully herein.
- 49. 2Wire admits that on its face United States Patent No. 8,355,427 ("the '427 Patent") is entitled "System and Method for Descrambling the Phase of Carriers in a Multicarrier Communications System" and bears an issue date of January 15, 2013. 2Wire further admits that Exhibit 6 to the SAC purports to be a copy of the '427 Patent. Except as admitted, 2Wire lacks sufficient knowledge or information to form a belief as to the remaining allegations in this paragraph and on that basis denies them.
 - 50. 2Wire denies the allegations of this paragraph.
- 51. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
- 52. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
 - 53. 2Wire denies the allegations of this paragraph.

COUNT VII — INFRINGEMENT OF U.S. PATENT NO. 7,453,881

- 54. 2Wire incorporates by reference its responses to Paragraphs 1-17 as though set forth fully herein.
- 55. 2Wire admits that on its face United States Patent No. 7,453,881 ("the '881 Patent") is entitled "Systems and Methods for Multi-pair ATM Over DSL." 2Wire admits that the '881 Patent bears an issue date of November 18, 2008. 2Wire further admits that Exhibit 7 to

the SAC purports to be a copy of the '881 Patent. Except as admitted, 2Wire lacks sufficient knowledge or information to form a belief as to the remaining allegations in this paragraph and on that basis denies them.

- 56. 2Wire denies the allegations of this paragraph.
- 57. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
- 58. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
 - 59. 2Wire denies the allegations of this paragraph.

COUNT VIII — INFRINGEMENT OF U.S. PATENT NO. 7,978,706

- 60. 2Wire incorporates by reference its responses to Paragraphs 1-17 as though set forth fully herein.
- 61. 2Wire admits that on its face United States Patent No. 7,978,706 ("the '706 Patent") is entitled "Combining Multiple DSL Transceivers for a High Data Rate Connection." 2Wire admits that the '706 Patent bears an issue date of July 12, 2011. 2Wire further admits that Exhibit 8 to the SAC purports to be a copy of the '706 Patent. Except as admitted, 2Wire lacks sufficient knowledge or information to form a belief as to the remaining allegations in this paragraph and on that basis denies them.
 - 62. 2Wire denies the allegations of this paragraph.
- 63. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required,

2Wire denies the allegations of this paragraph.

- 64. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
 - 65. 2Wire denies the allegations of this paragraph.

COUNT IX — INFRINGEMENT OF U.S. PATENT NO. 8,422,511

- 66. 2Wire incorporates by reference its responses to Paragraphs 1-17 as though set forth fully herein.
- 67. 2Wire admits that on its face United States Patent No. 8,422,511 ("the '511 Patent") is entitled "Systems and Methods for Multi-pair ATM Over DSL" and bears an issue date of April 16, 2013. 2Wire further admits that Exhibit 9 to the SAC purports to be a copy of the '511 Patent. Except as admitted, 2Wire lacks sufficient knowledge or information to form a belief as to the remaining allegations in this paragraph and on that basis denies them.
 - 68. 2Wire denies the allegations of this paragraph.
- 69. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
- 70. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
 - 71. 2Wire denies the allegations of this paragraph.

COUNT X — INFRINGEMENT OF U.S. PATENT NO. 7,889,784

72. 2Wire incorporates by reference its responses to Paragraphs 1-17 as though set

forth fully herein.

- 73. 2Wire admits that on its face United States Patent No. 7,889,784 ("the '784 Patent") is entitled "Multicarrier Modulation Messaging for SNR Per Subchannel During Showtime Information" and bears an issue date of February 15, 2011. 2Wire further admits that Exhibit 10 to the SAC purports to be a copy of the '784 Patent. Except as admitted, 2Wire lacks sufficient knowledge or information to form a belief as to the remaining allegations in this paragraph and on that basis denies them.
 - 74. 2Wire denies the allegations of this paragraph.
- 75. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
- 76. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
 - 77. 2Wire denies the allegations of this paragraph.

COUNT XI — INFRINGEMENT OF U.S. PATENT NO. 7,835,430

- 78. 2Wire incorporates by reference its responses to Paragraphs 1-17 as though set forth fully herein.
- 79. 2Wire admits that on its face United States Patent No. 7,835,430 ("the '430 Patent") is entitled "Multicarrier Modulation Messaging for Frequency Domain Received Idle Channel Noise Information" and bears an issue date of November 16, 2010. 2Wire further admits that Exhibit 11 to the SAC purports to be a copy of the '430 Patent. Except as admitted, 2Wire lacks sufficient knowledge or information to form a belief as to the remaining allegations in this

paragraph and on that basis denies them.

- 80. 2Wire denies the allegations of this paragraph.
- 81. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
- 82. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
 - 83. 2Wire denies the allegations of this paragraph.

COUNT XII — INFRINGEMENT OF U.S. PATENT NO. 7,570,686

- 84. 2Wire incorporates by reference its responses to Paragraphs 1-17 as though set forth fully herein.
- 85. 2Wire admits that on its face United States Patent No. 7,570,686 ("the '686 Patent") is entitled "Systems and Methods For Establishing a Diagnostic Transmission Mode and Communicating Over the Same" and bears an issue date of August 4, 2009. 2Wire further admits that Exhibit 12 to the SAC purports to be a copy of the '686 Patent. Except as admitted, 2Wire lacks sufficient knowledge or information to form a belief as to the remaining allegations in this paragraph and on that basis denies them.
 - 86. 2Wire denies the allegations of this paragraph.
- 87. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
 - 88. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire

submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.

89. 2Wire denies the allegations of this paragraph.

COUNT XIII — INFRINGEMENT OF U.S. PATENT NO. 8,238,412

- 90. 2Wire incorporates by reference its responses to Paragraphs 1-17 as though set forth fully herein.
- 91. 2Wire admits that on its face United States Patent No. 8,238,412 ("the '412 Patent") is entitled "Multicarrier Modulation Messaging for Power Level Per Subchannel Information" and bears an issue date of August 7, 2012. 2Wire further admits that Exhibit 13 to the SAC purports to be a copy of the '412 Patent. Except as admitted, 2Wire lacks sufficient knowledge or information to form a belief as to the remaining allegations in this paragraph and on that basis denies them.
 - 92. 2Wire denies the allegations of this paragraph.
- 93. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
- 94. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
 - 95. 2Wire denies the allegations of this paragraph.

COUNT XIV — INFRINGEMENT OF U.S. PATENT NO. 8,432,956

96. 2Wire incorporates by reference its responses to Paragraphs 1-17 as though set forth fully herein.

- 97. 2Wire admits that on its face United States Patent No. 8,432,956 ("the '2,956 Patent") is entitled "Multicarrier Modulation Messaging for Power Level Per Subchannel Information" and bears an issue date of April 30, 2013. 2Wire further admits that Exhibit 14 to the SAC purports to be a copy of the '2,956 Patent. Except as admitted, 2Wire lacks sufficient knowledge or information to form a belief as to the remaining allegations in this paragraph and on that basis denies them.
 - 98. 2Wire denies the allegations of this paragraph.
- 99. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
- 100. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
 - 101. 2Wire denies the allegations of this paragraph.

COUNT XV — INFRINGEMENT OF U.S. PATENT NO. 7,451,379

- 102. 2Wire incorporates by reference its responses to Paragraphs 1-17 as though set forth fully herein.
- 103. 2Wire admits that on its face United States Patent No. 7,451,379 ("the '379 Patent") is entitled "CRC Counter Normalization" and bears an issue date of November 11, 2008. 2Wire further admits that Exhibit 15 to the SAC purports to be a copy of the '379 Patent. Except as admitted, 2Wire lacks sufficient knowledge or information to form a belief as to the remaining allegations in this paragraph and on that basis denies them.
 - 104. 2Wire denies the allegations of this paragraph.

- 105. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
- 106. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
 - 107. 2Wire denies the allegations of this paragraph.

COUNT XVI — INFRINGEMENT OF U.S. PATENT NO. 8,516,337

- 108. 2Wire incorporates by reference its responses to Paragraphs 1-17 as though set forth fully herein.
- 109. 2Wire admits that on its face United States Patent No. 8,516,337 ("the '337 Patent") is entitled "CRC Counter Normalization" and bears an issue date of August 20, 2013.

 2Wire further admits that Exhibit 16 to the SAC purports to be a copy of the '337 Patent. Except as admitted, 2Wire lacks sufficient knowledge or information to form a belief as to the remaining allegations in this paragraph and on that basis denies them.
 - 110. 2Wire denies the allegations of this paragraph.
- 111. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
- 112. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
 - 113. 2Wire denies the allegations of this paragraph.

COUNT XVII — INFRINGEMENT OF U.S. PATENT NO. 7,979,778

- 114. 2Wire incorporates by reference its responses to Paragraphs 1-17 as though set forth fully herein.
- Patent") is entitled "CRC Counter Normalization" and bears an issue date of July 12, 2011.

 2Wire further admits that Exhibit 17 to the SAC purports to be a copy of the '778 Patent. Except as admitted, 2Wire lacks sufficient knowledge or information to form a belief as to the remaining allegations in this paragraph and on that basis denies them.
 - 116. 2Wire denies the allegations of this paragraph.
- 117. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
- 118. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
 - 119. 2Wire denies the allegations of this paragraph.

COUNT XVIII — INFRINGEMENT OF U.S. PATENT NO. 7,925,958

- 120. 2Wire incorporates by reference its responses to Paragraphs 1-17 as though set forth fully herein.
- 121. 2Wire admits that on its face United States Patent No. 7,925,958 ("the '958 Patent") is entitled "CRC Counter Normalization" and bears an issue date of April 12, 2011, 2Wire further admits that Exhibit 18 to the SAC purports to be a copy of the '958 Patent. Except as admitted, 2Wire lacks sufficient knowledge or information to form a belief as to the remaining

allegations in this paragraph and on that basis denies them.

- 122. 2Wire denies the allegations of this paragraph.
- 123. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
- 124. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
 - 125. 2Wire denies the allegations of this paragraph.

COUNT XIX — INFRINGEMENT OF U.S. PATENT NO. 8,462,835

- 126. 2Wire incorporates by reference its responses to Paragraphs 1-17 as though set forth fully herein.
- 127. 2Wire admits that on its face United States Patent No. 8,462,835 ("the '835 Patent") is entitled "Impulse Noise Management" and bears an issue date of June 11, 2013.

 2Wire further admits that Exhibit 19 to the SAC purports to be a copy of the '835 Patent. Except as admitted, 2Wire lacks sufficient knowledge or information to form a belief as to the remaining allegations in this paragraph and on that basis denies them.
 - 128. 2Wire denies the allegations of this paragraph.
- 129. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
- 130. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required,

2Wire denies the allegations of this paragraph.

131. 2Wire denies the allegations of this paragraph.

COUNT XX — INFRINGEMENT OF U.S. PATENT NO. 7,836,381

- 132. 2Wire incorporates by reference its responses to Paragraphs 1-17 as though set forth fully herein.
- Patent") is entitled "Computer Readable Medium with Instructions for Resource Sharing in a Telecommunications Environment" and bears an issue date of November 16, 2010. 2Wire further admits that Exhibit 20 to the SAC purports to be a copy of the '381 Patent. Except as admitted, 2Wire lacks sufficient knowledge or information to form a belief as to the remaining allegations in this paragraph and on that basis denies them.
 - 134. 2Wire denies the allegations of this paragraph.
- 135. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
- 136. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
 - 137. 2Wire denies the allegations of this paragraph.

COUNT XXI — INFRINGEMENT OF U.S. PATENT NO. 7,844,882

- 138. 2Wire incorporates by reference its responses to Paragraphs 1-17 as though set forth fully herein.
 - 139. 2Wire admits that on its face United States Patent No. 7,844,882 ("the '882

Patent") is entitled "Resource Sharing in a Telecommunications Environment" and bears an issue date of November 30, 2010. 2Wire further admits that Exhibit 21 to the SAC purports to be a copy of the '882 Patent. Except as admitted, 2Wire lacks sufficient knowledge or information to form a belief as to the remaining allegations in this paragraph and on that basis denies them.

- 140. 2Wire denies the allegations of this paragraph.
- 141. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
- 142. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
 - 143. 2Wire denies the allegations of this paragraph.

COUNT XXII — INFRINGEMENT OF U.S. PATENT NO. 8,276,048

- 144. 2Wire incorporates by reference its responses to Paragraphs 1-17 as though set forth fully herein.
- Patent") is entitled "Resource Sharing in a Telecommunications Environment" and bears an issue date of September 25, 2012. 2Wire further admits that Exhibit 22 to the SAC purports to be a copy of the '048 Patent. Except as admitted, 2Wire lacks sufficient knowledge or information to form a belief as to the remaining allegations in this paragraph and on that basis denies them.
 - 146. 2Wire denies the allegations of this paragraph.
- 147. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required,

2Wire denies the allegations of this paragraph.

- 148. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
 - 149. 2Wire denies the allegations of this paragraph.

COUNT XXIII — INFRINGEMENT OF U.S. PATENT NO. 8,495,473

- 150. 2Wire incorporates by reference its responses to Paragraphs 1-17 as though set forth fully herein.
- Patent") is entitled "Resource Sharing in a Telecommunications Environment" and bears an issue date of July 23, 2013. 2Wire further admits that Exhibit 23 to the SAC purports to be a copy of the '473 Patent. Except as admitted, 2Wire lacks sufficient knowledge or information to form a belief as to the remaining allegations in this paragraph and on that basis denies them.
 - 152. 2Wire denies the allegations of this paragraph.
- 153. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
- 154. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
 - 155. 2Wire denies the allegations of this paragraph.

COUNT XXIV — INFRINGEMENT OF U.S. PATENT NO. 7,831,890

156. 2Wire incorporates by reference its responses to Paragraphs 1-17 as though set

forth fully herein.

- Patent") is entitled "Resource Sharing in a Telecommunications Environment" and bears an issue date of November 9, 2010. 2Wire further admits that Exhibit 24 to the SAC purports to be a copy of the '890 Patent. Except as admitted, 2Wire lacks sufficient knowledge or information to form a belief as to the remaining allegations in this paragraph and on that basis denies them.
 - 158. 2Wire denies the allegations of this paragraph.
- 159. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
- 160. This allegation has been dismissed by the Court. D.I. 43. Accordingly, 2Wire submits that no response to this allegation is required. To the extent that a response is required, 2Wire denies the allegations of this paragraph.
 - 161. 2Wire denies the allegations of this paragraph.

PRAYER FOR RELIEF

2Wire denies all of the allegations contained in the Prayer for Relief of the SAC and denies that TQD is entitled to any of the relief requested therein or to any other relief whatsoever from 2Wire.

AFFIRMATIVE AND OTHER DEFENSES

2Wire hereby asserts the following separate, distinct, and non-exclusive affirmative and other defenses to the claims and allegations contained in the SAC. 2Wire's investigation of it's the allegations and its defenses thereto is continuing, and 2Wire reserves the right to seek leave to amend its Answer to plead additional defenses or to supplement its existing defenses.

FIRST AFFIRMATIVE DEFENSE (Non-Infringement)

162. 2Wire does not infringe and has not infringed any valid and enforceable claim of the '008 Patent, '041 Patent, '627 Patent, '721 Patent, '610 Patent, '427 Patent, '881 Patent, '706 Patent, '511 Patent, '784 Patent, '430 Patent, '686 Patent, '412 Patent, '2,956 Patent, '379 Patent, '337 Patent, '778 Patent, '958 Patent, '835 Patent, '381 Patent, '882 Patent, '048 Patent, '473 Patent, and '890 Patent (the "Asserted Patents"), either literally or under the doctrine of equivalents. 2Wire has no liability for alleged infringement of the Asserted Patents.

SECOND AFFIRMATIVE DEFENSE (Failure to State a Claim)

163. The SAC fails to state any claim against 2Wire upon which relief can be granted.

THIRD AFFIRMATIVE DEFENSE (Invalidity)

164. The Asserted Patents are invalid and unenforceable for failure to comply with the requirements of 35 U.S.C. § 101, *et seq.*, including but not limited to 35 U.S.C. §§ 101, 102, 103, 112 and/or 116.

FOURTH AFFIRMATIVE DEFENSE (Waiver, Laches, and/or Estoppel)

165. TQD's claims for relief, in whole or in part, are barred by the doctrines of waiver, laches, and/or estoppel. At a minimum, TQD is barred from recovering any pre-suit damages as a result of waiver, laches, and/or estoppel. Furthermore, TQD is estopped from asserting one or more of the claims of the Asserted Patents in such a way as to allegedly cover 2Wire's activities by reason of statements and claim amendments made by or on behalf of the applicant to the United States Patent and Trademark Office or narrowing amendments made during the prosecution of the applications that led to the issuance of the Asserted Patents.

FIFTH AFFIRMATIVE DEFENSE (Exhaustion)

166. TQD's claims for relief and prayer for damages are barred by the doctrine of exhaustion.

SIXTH AFFIRMATIVE DEFENSE (Limitation on Damages)

167. TQD's claims for relief and prayer for damages are limited under 35 U.S.C. §§ 286-288.

SEVENTH AFFIRMATIVE DEFENSE (Injunctive Relief Unavailable)

adequate remedy at law and because TQD's claims otherwise fail to meet the requirements for such relief, including at least that TQD will not suffer irreparable harm and public policy concerns weigh against any injunctive relief. This is particularly true because some of the asserted patents and claims have been declared by TQD or its predecessor-in-interest to be standard-essential. *Apple Inc. v. Motorola, Inc.*, 2014 U.S. App. LEXIS 7757, at *106 (Fed. Cir. 2014).

EIGHTH AFFIRMATIVE DEFENSE (Unclean Hands)

169. TQD's claims are barred in whole or in part by the doctrine of unclean hands.

NINTH AFFIRMATIVE DEFENSE (Prosecution History Estoppel)

170. TQD is estopped from construing any claim of the Asserted Patents to be infringed or have been infringed, either literally or under the doctrine of equivalents, by any method or product manufactured, used, imported, sold or offered for sale by 2Wire in view of the prior art and because of admissions and statements that the applicants made to the USPTO

during prosecution of the applications leading to the issuance of the Asserted Patents.

TENTH AFFIRMATIVE DEFENSE (No Willful Infringement)

171. TQD is not entitled to enhanced or increased damages for willful infringement because Cisco has not engaged in any conduct that meets the applicable standard for willful infringement.

<u>ELEVENTH AFFIRMATIVE DEFENSE</u> (Patents Unenforceable)

172. The patents-in-suit are unenforceable because TQD or its predecessor-in-interest had an obligation to disclose them to the ITU in the course of the standard-setting process, TQD was aware of its disclosure obligations, and TQD failed to disclose the relevant patents.

COUNTERCLAIMS

Defendant and Counterclaimant 2Wire alleges Counterclaims as follows:

THE PARTIES

- 2Wire is a Delaware corporation with its principal place of business at 1764
 Automation Parkway, San Jose California 95131.
- 2. TQD purports to be a Texas limited liability company with its principal place of business at 805 Las Cimas Parkway, Suite 240, Austin, Texas 78746.

JURISDICTION AND VENUE

3. This is an action for declaratory relief for which this Court has jurisdiction under 28 U.S.C. §§ 1331, 1338, 1367, 2201, and 2202. This Court has supplemental jurisdiction over 2Wire's state law claims because such claims arise from a common nucleus of facts as the federal patent claims raised.

- 4. By filing its lawsuit against 2Wire, TQD has consented to the personal jurisdiction of this Court.
- 5. 2Wire submits that this District is not the most appropriate or convenient forum in which to lay venue in this case. To the extent the underlying action brought by TQD against 2Wire proceeds in this District, then venue as to these counterclaims is proper under 28 U.S.C. §§ 1391(c) and 1400(b) because TQD has consented to the personal jurisdiction of this Court and because the facts and circumstances alleged in these counterclaims are related to the facts and circumstances alleged in the Second Amended Complaint ("SAC").
- 6. In the SAC, TQD asserts claims against 2Wire for infringement of the Asserted Patents and asserts that the Asserted Patents are valid.
- 7. In 2Wire's Answer and Affirmative and Other Defenses to TQD's SAC, 2Wire denies TQD's claims of infringement of the patents asserted in the SAC and alleges that such patents are invalid.
- 8. An actual controversy has arisen and now exists between 2Wire and TQD as to the non-infringement and invalidity of the patents asserted in the SAC.

FACTUAL ALLEGATIONS

9. In the SAC, TQD alleges that 2Wire has infringed one or more claims of United States Patent Nos. 8,090,008 ("the '008 Patent"), 8,073,041 ("the '041Patent"), 7,292,627 ("the '627 Patent"), 7,471,721 ("the '721 Patent"), 8,218,610 ("the '610 Patent"), 8,355,427 ("the '427 Patent"), 7,453,881 ("the '881 Patent"), 7,978,706 ("the '706 Patent"), 8,422,511 ("the '511 Patent"), 7,889,784 ("the '784 Patent"), 7,835,430 ("the '430 Patent"), 7,570,686 ("the '686 Patent"), 8,238,412 ("the '412 Patent"), 8,432,956 ("the '2,956 Patent"), 7,451,379 ("the '379 Patent"), 8,516,337 ("the '337 Patent"), 7,979,778 ("the '778 Patent"), 7,925,958 ("the '958

Patent"), 8,462,835 ("the '835 Patent"), 7,836,381 ("the '381 Patent"), 7,844,882 ("the '882 Patent"), 8,276,048 ("the '048 Patent"), 8,495,473 ("the '473 Patent"), 7,831,890 ("the '890 Patent"), (collectively the "Asserted Patents"). TQD purports to be the owner by assignment of the Asserted Patents.

- 10. TQD alleges that the Asserted Patents relate to digital subscriber line ("DSL") technology and that "the use of one or patent claims in the [TQD DSL patent] portfolio may be required to practice or otherwise comply with certain DSL-related Recommendations, Deliverables and/or standards, such as those promulgated by the ITU.
- 11. 2Wire manufactures customer equipment that operate in accordance with various DSL related standards.
- 12. As a member of the ITU, TQD or its predecessor-in-interest in the Asserted Patents has made contractual commitments to the ITU to license its allegedly standard-essential patents on terms that are fair, reasonable, and non-discriminatory or reasonable and demonstrably free of unfair discrimination (hereinafter, "FRAND"). The ITU's Common Patent Policy seeks from holders of allegedly essential patents declarations that they are prepared to grant licenses either "free of charge" or "on a non-discriminatory basis on reasonable terms and conditions." Where a patent holder refuses to make such a declaration and indicates that it is not willing to license under FRAND terms, "the Recommendation/Deliverable shall not include provisions depending on the patent."
- 13. When a patentee voluntarily commits to allow manufacturers willing to take a license on FRAND terms to practice its allegedly essentially patents under FRAND terms and conditions, it agrees to permit use of the allegedly essential patent on FRAND terms creates enforceable contractual obligations and rights.

- 14. These contractual rights and obligations are enforceable by willing patentees who are third-party beneficiaries of the agreements between the patentee and the ITU.
- 15. In July 2013, TQD sent a letter to Pace Americas, Inc. ("Pace") regarding TQD's DSL patent portfolio.
- 16. On or around August 28, 2013, TQD first contacted Pace by telephone and the parties thereafter engaged in discussions centered around 2Wire and Pace licensing some or all of TQD's patent portfolio.
- 17. On or around September 4, 2013, TQD sent to Pace a proposed non-disclosure/standstill agreement to facilitate ongoing discussions about 2Wire licensing some or all of TQD's patent portfolio.
- 18. On or around October 7, 2013, 2Wire indicated that it was willing to meet in person with TQD to discuss any proposal by TQD relating to a license to TQD's patent portfolio. TQD refused.
- 19. By November 1, 2013, the parties had agreed to nearly all of the material terms of a non-disclosure/standstill agreement.
- 20. On November 4, 2013, and without notice TQD filed this lawsuit in the United States District Court in Delaware.

COUNTERCLAIM I (Declaratory Judgment of Invalidity)

- 21. 2Wire realleges and incorporates by reference the allegations of Paragraphs 1-20 of its Counterclaims as though fully set forth herein.
- 22. The claims of the Asserted Patents are invalid for failure to meet the requirements of one or more sections of 35 U.S.C. §§ 101 *et seq.* and/or one or more sections of 37 C.F.R.

COUNTERCLAIM II

(Declaratory Judgment of Non-Infringement)

- 23. 2Wire realleges and incorporates by reference the allegations of Paragraphs 1-20 of its Counterclaims as though fully set forth herein.
- 24. 2Wire has not infringed and is not infringing, either directly or indirectly, any valid and enforceable claim of the Asserted Patents.

COUNTERCLAIM III (Breach of Contract)

- 25. 2Wire realleges and incorporates by reference the allegations of Paragraphs 1-20 of its Counterclaims as though fully set forth herein.
- 26. TQD entered into express or implied contractual communication with ITU and its members, affiliates and adopters relating to the DSL Standards. TQD's irrevocable undertakings to the ITU, and manufacturers of standard-compliant products, to permit use of its allegedly essential patents, including the Asserted Patents, by manufacturers like 2Wire on FRAND terms created contractual agreements.
- 27. Each third party that would potentially implement the DSL-related technology was an intended beneficiary of those contracts. Specifically, TQD's undertakings to the ITU create binding and enforceable agreements that 2Wire is entitled to enforce as either a party or a third-party beneficiary.
- 28. TQD was contractually obligated, among other things, to grant licenses to its identified patents consistent with the applicable patent policy of the standards and bylaws of the ITU.
- 29. TQD breached its contractual commitments when it (i) failed to grant any necessary licenses to 2Wire on FRAND terms and conditions; (ii) failed to seek a determination of FRAND license terms and conditions from a competent court or tribunal; and (iii) prosecuted

this infringement action seeking a permanent injunction. In so doing, TQD has also violated the implied covenant of good faith and fair dealing that adheres to every contract.

- 30. TQD again breached these contracts by filing patent infringement actions seeking to enjoin 2Wire's implementation of the technology of the allegedly "essential" patents and to exclude 2Wire from, among other things, importing or selling products that implement such technology. To the extent this technology is actually necessary to implementation of the relevant standards, TQD was obligated to grant licenses to 2Wire on FRAND terms.
- 31. As a result of TQD's contractual breaches, 2Wire has been injured in its business or property, and is threatened by imminent loss of profits, loss of customers and potential customers, and loss of goodwill and product image.
- 32. 2Wire will suffer irreparable injury by reason of the acts, practices, and conduct of TQD alleged above until and unless the Court enjoins such acts, practices, and conduct. 2Wire has no adequate remedy at law for TQD's breach of its contractual obligations.
- 33. Among other things, 2Wire is entitled to a preliminary and permanent injunction prohibiting TQD from enforcing its allegedly "essential" patents against 2Wire, or from excluding 2Wire from implementing the technology allegedly embodied in those patents.
- 34. 2Wire seeks an award of specific performance requiring TQD to submit to 2Wire a license offer that is capable of acceptance by 2Wire for a license on FRAND terms and conditions determined by the Court for the Asserted Patents.
- 35. In the event that the Court does not order TQ Delta to make 2Wire an offer capable of acceptance for a license to the Asserted Patents on FRAND terms, 2Wire seeks an award of specific performance requiring TQD to submit to 2Wire a license offer that is capable

of acceptance by 2Wire for a license on FRAND terms and conditions determined by the Court for TQD's portfolio of United States patents that TQD has alleged are essential to ITU standards.

36. As a direct and proximate result of TQD's failure to abide by its contractual obligations and instead file the instant lawsuit, 2Wire has been forced to expend money in the form of attorneys' fees and related litigation costs. 2Wire also seeks monetary damages in amount equal to the attorneys' fees and related litigation costs that it has incurred in defending against the allegations in the SAC.

PRAYER FOR RELIEF

WHEREFORE, 2Wire prays for the entry of judgment as follows:

- A. Find that TQD take nothing for relief;
- B. Dismiss TQD's claims be dismissed with prejudice;
- C. Enter judgment that each of the Asserted Patents and their claims invalid;
- D. Enter judgment that 2Wire has not infringed and is not infringing, directly or indirectly, any valid and enforceable claim of any of the Asserted Patents;
- E. Enter judgment that TQD is liable for breach of contract;
- F. Enter judgment decreeing that 2Wire is entitled to license any and all patents that fall within TQD's commitments to the ITU in relation to DSL-related technology, on a fair and nondiscriminatory basis on reasonable terms and conditions;
- G. Enter judgment against TQD for the amount of damages that 2Wire proves at trial;

- H. Award 2Wire its attorneys' fees and costs in this action, including prejudgment interest thereon, under 35 U.S.C. § 285 and/or any other applicable statute or rule; and
- I. Award such other and further relief as the Court deems just and equitable.

JURY TRIAL DEMAND

2Wire demands a jury trial in this action on all issues so triable.

MORGAN, LEWIS & BOCKIUS LLP

By: /s/ Colm F. Connolly

Colm F. Connolly (#3151) The Nemours Building 1007 N. Orange Street, Suite 501 Wilmington, DE 19801 (302) 574-7290 (302) 574-3001 cconnolly@morganlewis.com

Counsel for Defendant/Countercomplainant 2Wire, Inc.

Date: June 2, 2014